

COMPLETE SET OF PENDING CLAIMS

1. (Previously canceled)
2. (Currently amended) The plasma display panel of Claim 20, wherein the permittivity ϵ of the dielectric layer is 7 or less.
3. (Canceled)
4. (Canceled)
5. (Currently amended) The plasma display panel of Claim 20, wherein the dielectric layer is composed of a ZnO-base glass which contains 20-44 wt% of ZnO, 38-55 wt% of B_2O_3 , 5-12 wt% of SiO_2 , 10 wt% or less of R_2O , and 10 wt% or less of MO, and the permittivity ϵ of the dielectric layer is 7 or less, wherein R is selected from a group consisting of ~~Li, Na, K, Rb, Cs, Cu, and Ag~~, and M is selected from a group consisting of ~~Mg~~, Ca, ~~Ba~~, Sr, Co, and Cr.
6. (Currently amended) The plasma display panel of Claim 20, wherein the dielectric layer is composed of a ZnO-base glass which contains 20-43 wt% of ZnO, 38-55 wt% of B_2O_3 , 5-12 wt% of SiO_2 , 1-10 wt% of Al_2O_3 , 10 wt% or less of R_2O , and 10 wt% or less of MO, and the permittivity ϵ of the dielectric layer is 7 or less, wherein R is selected from a group consisting of ~~Li, Na, K, Rb, Cs, Cu, and Ag~~, and M is selected from a group consisting of ~~Mg~~, Ca, ~~Ba~~, Sr, Co, and Cr.

Claims 7-10 (Canceled)

Claims 11-17 (Previously canceled)

18. (Currently amended) The plasma display panel of Claim 27, wherein the second dielectric layer is made of a glass that contains at least ZnO and 10 wt% or less of R₂O and does not substantially contain PbO and Bi₂O₃, wherein R is selected from a group consisting of Li, Na, K, Rb, Cs, Cu, and Ag.

19. (Currently amended) The plasma display panel of Claim 27, wherein a total thickness of the dielectric layer is 40 μm or less, and a thickness of the first dielectric layer is half of the total thickness or less.

20. (Currently amended) A plasma display panel in which a space between a first plate and a second plate facing each other is filled with a discharge gas, a plurality of pairs of display electrodes made of Ag are formed on a surface of the first plate facing the second plate, and the surface of the first plate is covered with a dielectric layer covering the plurality of pairs of display electrodes, characterized in that:

the dielectric layer is made of a glass that contains at least ZnO and 10 wt% or less of R₂O and does not substantially contain PbO and Bi₂O₃, and a product of permittivity ϵ and loss factor tan δ of the dielectric layer is 0.12 or less, wherein R is selected from a group consisting of ~~Li, Na, K, Rb, Cs, Cu, and Ag~~.

21. (Previously added) A plasma display panel in which a space between a first plate and a second plate facing each other is filled with a discharge gas, a plurality of pairs of display electrodes made of Ag are formed on a surface of the first plate facing the second plate, and the surface of the first plate is covered with a dielectric layer covering the plurality of pairs of display electrodes, characterized in that:

the dielectric layer is made of a glass which is composed of 20-30 wt% of P₂O₅, 30-40 wt% of ZnO, 30-45 wt% of B₂O₃, and 1-10 wt% of SiO₂ and a product of permittivity ϵ and loss factor tan δ of the dielectric layer is 0.12 or less.

Claims 22-25 (Canceled)

26. (Previously added) A plasma display panel in which a space between a first plate and a second plate facing each other is filled with a discharge gas, a plurality of pairs of display electrodes made of Ag are formed on a surface of the first plate facing the second plate, and the surface of the first plate is covered with a dielectric layer covering the plurality of pairs of display electrodes, characterized in that:

the dielectric layer is made of a glass which is composed of 9-20 wt% of Nb_2O_5 , 35-60 wt% of ZnO , 25-40 wt% of B_2O_3 , and 1-10 wt% of SiO_2 , and a product of permittivity ϵ and loss factor $\tan \delta$ of the dielectric layer is 0.12 or less.

27. (Previously added) A plasma display panel in which a space between a first plate and a second plate facing each other is filled with a discharge gas, a plurality of pairs of display electrodes made of Ag are formed on a surface of the first plate facing the second plate, and the surface of the first plate is covered with a dielectric layer covering the plurality of pairs of display electrodes, characterized in that:

the dielectric layer is composed of

a first dielectric layer which either is a thin film of SiO_2 , Al_2O_3 or ZnO or is made of a glass containing at least PbO or Bi_2O_3 and covers the plurality of pairs of display electrodes, and

a second dielectric layer made of a glass in which a product of permittivity ϵ and loss factor $\tan \delta$ is 0.12 or less, the second dielectric layer covering the first dielectric layer.

28. (New) A plasma display panel in which a space between a first plate and a second plate facing each other is filled with a discharge gas, a plurality of pairs of display electrodes made of Ag are formed on a surface of the first plate facing the second plate, and the surface of the first plate is covered with a dielectric layer covering the plurality of pairs of display electrodes, characterized in that:

the dielectric layer is made of a glass that contains 10-25 wt% of P_2O_5 , 20-35 wt% of ZnO , 30-40 wt% of B_2O_3 , 5-12 wt% of SiO_2 , 10 wt% or less of R_2O , and 10 wt% or less of D_2O , and does not substantially contain PbO and Bi_2O_3 , and the permittivity ϵ of the dielectric layer is 7 or less and a product of permittivity ϵ and loss factor $\tan \delta$ of the dielectric layer is 0.12 or less, wherein R is selected from a group consisting of K, Rb, Cs, Cu, and Ag and wherein D is selected from a group consisting of Mg, Ca, Ba, Sr, Co, Cr, and Ni.

29. (New) A plasma display panel in which a space between a first plate and a second plate facing each other is filled with a discharge gas, a plurality of pairs of display electrodes made of Ag are formed on a surface of the first plate facing the second plate, and the surface of the first plate is covered with a dielectric layer covering the plurality of pairs of display electrodes, characterized in that:

the dielectric layer is composed of a ZnO-P₂O₅-base glass which contains 42-50 wt% of P₂O₅, 35-50 wt% of ZnO, 7-14 wt% of Al₂O₃, 5 wt% or less of Na₂O, and 10 wt% or less of R₂O and does not substantially contain PbO and Bi₂O₃, and the permittivity ϵ of the dielectric layer is 7 or less and a product of permittivity ϵ and loss factor tan δ of the dielectric layer is 0.12 or less, wherein R is selected from a group consisting of K, Rb, Cs, Cu, and Ag.

30. (New) A plasma display panel in which a space between a first plate and a second plate facing each other is filled with a discharge gas, a plurality of pairs of display electrodes made of Ag are formed on a surface of the first plate facing the second plate, and the surface of the first plate is covered with a dielectric layer covering the plurality of pairs of display electrodes, characterized in that:

the dielectric layer is composed of a ZnO-base glass which contains 1-15 wt% of ZnO, 20-40 wt% of B₂O₃, 10-30 wt% of SiO₂, 5-25 wt% of Al₂O₃, 3-10 wt% of Li₂O, 2-15 wt% of MO, and 10 wt% or less of R₂O and does not substantially contain PbO and Bi₂O₃, and the permittivity ϵ of the dielectric layer is 7 or less and a product of permittivity ϵ and loss factor tan δ of the dielectric layer is 0.12 or less, wherein R is selected from a group consisting of K, Rb, Cs, Cu, and Ag and wherein M is selected from a group consisting of Mg, Ca, Ba, Sr, Co, and Cr.

31. (New) A plasma display panel in which a space between a first plate and a second plate facing each other is filled with a discharge gas, a plurality of pairs of display electrodes made of Ag are formed on a surface of the first plate facing the second plate, and the surface of the first plate is covered with a dielectric layer covering the plurality of pairs of display electrodes, characterized in that:

the dielectric layer is composed of a ZnO-base glass which contains 35-60 wt% of ZnO, 25-45 wt% of B₂O₃, 1-10.5 wt% of SiO₂, 1-10 wt% of Al₂O₃, 5 wt% or less of Na₂O, and 10 wt% or less of R₂O and does not substantially contain PbO and Bi₂O₃, and the permittivity ϵ of the dielectric layer is 7 or less and a product of permittivity ϵ and loss factor tan δ of the dielectric layer is 0.12 or less, wherein R is selected from a group consisting of K, Rb, Cs, Cu, and Ag.

32. (New) A plasma display panel in which a space between a first plate and a second plate facing each other is filled with a discharge gas, a plurality of pairs of display electrodes made of Ag are formed on a surface of the first plate facing the second plate, and the surface of the first plate is covered with a dielectric layer covering the plurality of pairs of display electrodes, characterized in that:

the dielectric layer is composed of a ZnO-Nb₂O₅-base glass which contains 9-19 wt% of Nb₂O₅, 35-60 wt% of ZnO, 20-38 wt% of B₂O₃, 1-10.5 wt% of SiO₂, 5 wt% or less of Li₂O, and 10 wt% or less of R₂O and does not substantially contain PbO and Bi₂O₃, and the permittivity ϵ of the dielectric layer is 7 or less and a product of permittivity ϵ and loss factor tan δ of the dielectric layer is 0.12 or less, wherein R is selected from a group consisting of K, Rb, Cs, Cu, and Ag.

33. (New) A plasma display panel in which a space between a first plate and a second plate facing each other is filled with a discharge gas, a plurality of pairs of display electrodes made of Ag are formed on a surface of the first plate facing the second plate, and the surface of the first plate is covered with a dielectric layer covering the plurality of pairs of display electrodes, characterized in that:

the dielectric layer is composed of a ZnO-base glass which contains 35-60 wt% of ZnO, 25-45 wt% of B₂O₃, 1-12 wt% of SiO₂, 1-10 wt% of Al₂O₃, 5 wt% or less of K₂O, and 10 wt% or less of R₂O and does not substantially contain PbO and Bi₂O₃, and the permittivity ϵ of the dielectric layer is 7 or less and a product of permittivity ϵ and loss factor tan δ of the dielectric layer is 0.12 or less, wherein R is selected from a group consisting of Rb, Cs, Cu, and Ag.